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Pathological findings in wild European otters (*Lutra lutra*) in Scotland

Citation for published version:

Philbey, A, McCafferty, DJ, Maclachlan, R, Yoxon, GM, Tyler, GA & Conroy, JWH 2010, 'Pathological findings in wild European otters (*Lutra lutra*) in Scotland', Postmortem Tools for Otter Monitoring and Research, Kalø, Denmark, 24/02/10 - 27/02/10.

Link:

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Document Version:

Early version, also known as pre-print

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Pathological findings in 66 wild European otters (*Lutra lutra*) in Scotland: 2007-2008

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63rd Annual Meeting of the Association of Veterinary Teaching and Research Work,
Scarborough, England, 6-8 April 2009, p 34 (Abstract 56)

The Scottish Otter Mortality Study

Wild European (Eurasian) otters: *Lutra lutra*

- Located throughout Europe including UK
- Sentinel species: Top of their food chain
- Coastal and riverine environments
- Monitoring causes of mortality in wild otters is an important component of population studies to assess the conservation status of this species

The Scottish Otter Mortality Study

2007-2008: 66 Wild Otters

- Isle of Skye
- Shetland Islands
- Loch Lomond and the Trossachs National Park
- Other areas of mainland Scotland

Causes of Death in Adult Otters

• Trauma		52
Motor vehicle accidents	51	
Gun shot wound	1	
• Septic infection of wounds		3
• Inanition		3
Ageing; Dental attrition		
• Aspiration pneumonia		1
Accidental inhalation of plant material		
• Undetermined		3
Total adults		62

Otter: Trauma: Road traffic accident



Otter: Trauma: Haemothorax



Male Otter: Found dead in Moray by mouth of River Spey



Otter: Examination of teeth



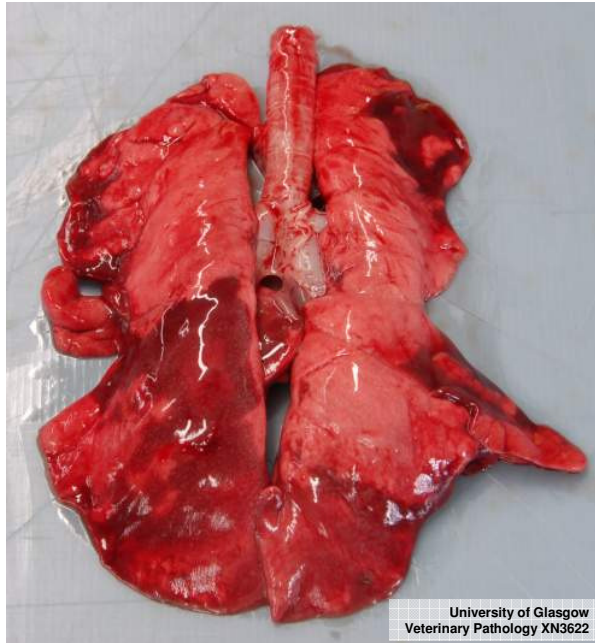
Otter: Bite wound: Cellulitis



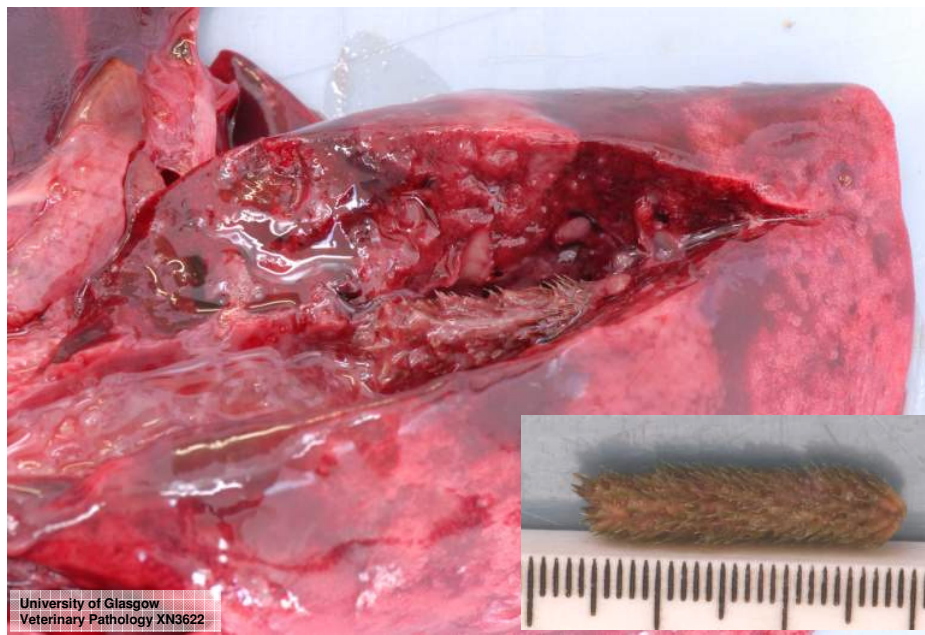
Otter: Tracking cellulitis: Purulent exudate in mediastinum



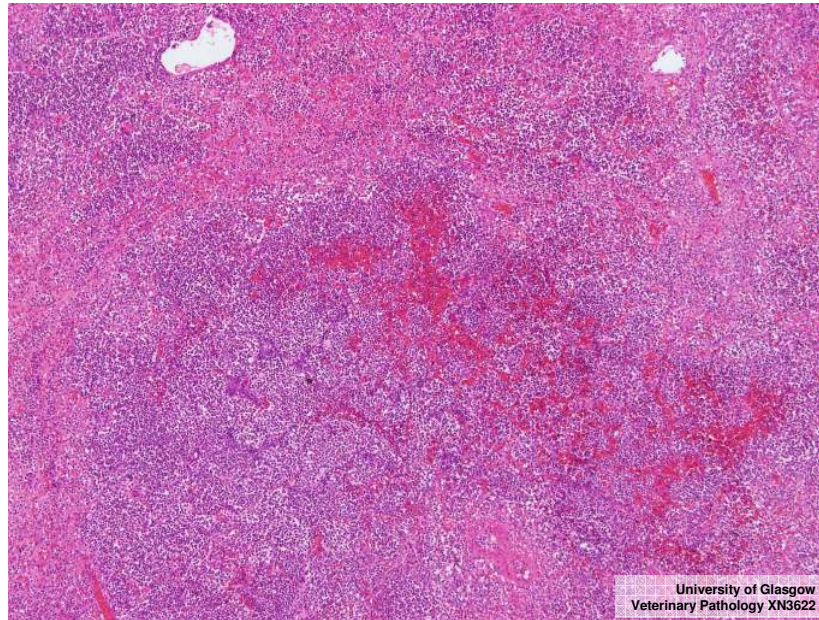
Otter: Lungs: Consolidation



Otter: Aspiration pneumonia: Inhaled reed



Otter: Aspiration: Suppurative bronchopneumonia



Causes of Death in Otter Cubs

• Died in rescue centres	3
“Stressed otter syndrome”	
• Undetermined	1
<hr/>	
Total cubs	4

“Stressed Otter Syndrome”: Gastric haemorrhage



Pathology in Otters

Incidental findings

- Healed fight wounds
- Foot lesions: Abrasions, Cuts
- Adiaspiromycosis: Pulmonary mycosis
- Gastric nematodes

Otter: Foot lesions



Infectious diseases

- Bile fluke
- Viral infections
 - Infectious canine hepatitis
- Bacterial infections
 - *Brucella*
 - *Salmonella*
 - *Yersinia*

Non-infectious diseases

- **Urolithiasis?**
 - **Common in captive Asian short clawed otters**
 - **Appears to be rare in wild otters**
- **Anomalies of eye development?**
 - **Retinal dysplasia?**



Otter: Eye

Collection of Samples

- **Genetic analysis**
- **Pesticide residue analysis**
- **Stomach contents**
- **Intestinal contents**
- **Spleen**
- **Teeth**

Otter: Uterus: Pregnant

